## ABSTRACT OF THE DISCLOSURE

Residue calculating sections respectively obtain residues which take a plurality of integers as modulus, with respect to a user ID. The plurality of integers are stored in modulus storage sections and are prime to each other. Based on these residues and parameters stored in a coding parameter storage section, component codes constructed by continuous sequences of 1 and 0 using a predetermined number of bits as a unit are respectively generated by component code generating sections. These component codes are concatenated by a concatenating section, thereby to obtain a code to be embedded, which constructs watermark information.

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